

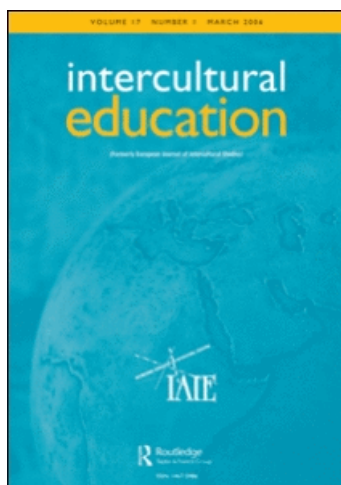
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Complex Instruction: managing professional development and school culture

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Complex Instruction (CI) is a comprehensive programme relating to curriculum development and instructional methodology, using multiple ability tasks and status interventions as key concepts. In 2006, at the end of a teacher training course, a group of primary school teachers decided to develop and experiment with original CI teaching units in their classrooms in Bologna and the surrounding province. The author developed a qualitative research project using ethnographic methodology to investigate and understand how this instructional innovation was proceeding and how it was being implemented by the Bologna teacher group. The paper critically reflects on the introduction of an alternative approach in an Italian context by examining how teachers did or did not reach new educational goals and how they coped with their schools' structural conditions (such as schedules, curriculum demands) as well as cultural factors (such as professional values). The paper discusses how the CI strategy was debated and interpreted by the teachers involved, and the barriers and opportunities for implementation.

Keywords: Complex Instruction; educational innovation; culture of the school; culture of learning; primary school teachers

Introduction

A question which always arises among teachers at the end of training courses on cooperative learning is how to put into practice the new information that they have just learned. Once the theoretical aspects have been understood and shared by most, teachers are not necessarily clear about how to apply new insights in their classrooms. How will the new ideas be implemented? What does introducing a methodological innovation in school imply once the teacher training course has ended? What does it mean when they organize learning activities for their students?

The issues above call for further reflection.¹ Most studies on cooperative learning focus on school achievement and on student results, rarely dealing with the way in which teachers, after attending a cooperative learning course, think about the new ideas and strategies they have been introduced to, and how they think implementation can best take place.

For these reasons, my contribution aims less to evaluate the degree of acquisition and the success of 'good practice', but instead critically investigates how the original

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teaching units were designed by a group of teachers using Complex Instruction (CI – the cooperative learning approach I follow). Focusing on the teachers' professional context allows the role played by the school context and its actors in the process of re-interpreting and re-adapting the goals and practical implications of this educational strategy to be discussed and problematized.

Complex Instruction: a strategy for heterogeneous classes

In the contemporary debate regarding equal opportunities in education, cooperative learning is often suggested as a resource for promoting the active participation of each student in the process of learning at school.² CI is a comprehensive programme of curriculum and instruction developed by Elizabeth Cohen at Stanford University (Cohen 1994; Cohen and Lotan 1997). This strategy, based on organizational theory and expectation states theory (expectations for competence), has great potential for intercultural education, owing to its specific aim of seeing differences as resources and promoting equity in heterogeneous classrooms (Batelaan 1998; Gobbo 2000).

This strategy recognizes that each student can bring different intellectual abilities and skills to the learning process and make an original contribution to solving a task. This is accomplished through group work that relies on the interdependence of the participants, with respect to knowledge and competences (Batelaan 1998; Batelaan and Gundara 2000; Gobbo 2000; Verlot and Pinxten 2000). To quote Cohen: 'None of us has all the abilities that will be needed today, but each one of us has at least one' (Cohen 2003, 164). By means of addressing status characteristics³ and applying status treatments in the classroom, the methodology contributes to changing the social dynamics of the classroom by making it a more equitable place. The delegation of authority to the group for solving an open-ended task⁴ and assigning competences to low-status students are the main means of changing (or at least widening) the conception of what it means to be 'smart' and creating a mixed set of expectations for each student (Cohen 2003; Lotan 2003, 2006).

The close relationship between intercultural education and CI became the focal point of a European Socrates Project, the CLIP⁵ (Batelaan 1998), with the purpose of disseminating CI in the European context. Subsequently, in 2004, an in-service teacher training course on CI took place in Bologna, supported by the Intercultural Centre CD/Lei (Augelli et al. 2005).

CI at school: research on a group of Italian teachers

A group of teachers continued to work with Professor Francesca Gobbo at the University of Turin after the above-mentioned course, planning and experimenting with new CI teaching units in their classes (2004–05). Various issues emerged in this first phase (Gobbo 2007). Having taken part in this stage, I continued and further developed the research which had started with that particular group of teachers.

Research participants and context

The group consisted of six tenured teachers working in different primary schools in Bologna and the surrounding province. Two of them taught second grade, one third

grade, one fourth grade and one fifth grade.⁶ Each of them taught a different subject: Italian, maths, science, history, English as a second language or music. The teachers organized themselves autonomously and planned informal and voluntary meetings that took place once or twice a month starting in October 2006 (for at least four hours each time) at one of the schools involved in the project or, alternatively, in the private homes of the teachers.

Research method

An ethnographic research project was developed in order to study the introduction of cooperative learning in one Italian educational context. It took into consideration how such ideas and strategies were interpreted when they reached a new environment and the role played by the teacher's professional identity.

Since I supervised the design of the new CI teaching units, I was able to collect data using participant observation for more than one year by taking field notes and gathering material. Interviews with the teachers were also used in order to understand their educational objectives and what motivated them to proceed with CI. It was decided to use ethnographic methodology because of its potential to inquire into the capacity of schools to understand diversity and promote innovation (Gobbo 2003). Taking part in their shared culture allows the researcher to observe and focus on the participants' points of view on the educational reality in which they are working and to understand the meaning that they attribute to CI and, in general, to their daily professional experiences.

A CI teaching unit: 'Sapore è Sapere?'

'*Sapore è Sapere?*', a pun in Italian to express the concept 'Is tasting learning?', was the name and focus of the CI teaching unit designed in the 2006–07 school year. This 'main idea' led to the examination of the role which is played by food in the development of human civilization and how the availability of food has influenced this. Centred around this question, the interdisciplinary teaching unit was developed through five different activities relating to: (1) humans and plants – from agriculture to GMO (Genetically Modified Organism); (2) the 'migration' of the potato and its social implications; (3) food for thought⁷ – the use of food in literature (similes, proverbs, metaphors, fairy tales and songs); (4) food for thought, the use of food in figurative art; and (5) what we eat and drink in our daily lives – correct nutrition.

The CI unit deals with issues of history, geography, Italian, science and art by requiring the use of multiple abilities and arranging open-ended group tasks. The teachers designed two different versions, one for younger children (first and second grades) and one for older children (third, fourth and fifth grades) taking into account the pupils' educational level and the Italian curriculum. The Bologna teachers planned and tested the CI unit in their own classes, rotating the different activities in each group in the 2006–07 and 2007–08 school years.

Experimenting with CI units: the teachers' perspectives

This paper reflects on the communicative processes that took place within the Bologna teacher group. By following, through participant observation, the teacher group

involved in the creation and discussion of the teaching unit '*Sapore è Sapere?*', my intention was to 'film' a professional context while it was being transformed, or better, while it tried to transform itself. During the meetings, the Bologna teachers became aware of, and discussed, critical educational issues such as how pupils learn, what and how to assess the work, how to teach; questions each teacher had to cope with by comparing the new educational goals with their own professional beliefs and values. Observing a group of teachers working in this manner is a fruitful way to investigate the difficulties and barriers that arise when implementing a new strategy, as well as the opportunities and resources available. One key aspect is how teachers 'position' themselves (Jeffrey 2006) with respect to their work, and in this particular case with respect to two specific aspects of CI teaching units: delegation of authority and the development of multiple ability tasks.

Teachers and delegation of authority

Delegating authority then becomes sharing with the students the power to make decisions about how to accomplish the task, how to work together productively, how to evaluate and enhance the quality of the group product and how to recognize the contributions of individual members of the group (Lotan 2006, 531).

In accordance with CI strategy, autonomy was one of the main goals pursued by the Bologna teachers. They often stated that schools should promote students' ability to make their own decisions and choices on how to proceed in learning tasks, independently from the teacher. As one teacher, Silvia⁸ (second grade) claimed: '[the educational objective] to me is problem-solving. Pupils must be able to understand and solve a problem'. They attempted to achieve this by proceeding through an inductive method and by emphasizing the process of understanding and discovering information, starting from pupils' experiences (things they had always done in their classrooms). Thus, the design of CI units reflected this processual and progressive style. For example, they did not want to make the 'Big Idea' clearly explicit at the beginning of the task, but they expected pupils to deduct it by engaging in the different activities. Similarly, the tasks were divided into small steps to encourage their pupils to discuss and solve problems – aspects which are not directly mentioned by Cohen.

At the same time, the teachers expressed their concerns about the ability of their pupils to work on their own. The doubt was whether the deeper sense of the activity would be understood or whether they would become disoriented by such activities. That was why Elena, a fifth-grade teacher, remarked many times: 'but adult mediation is a really important point in order to relate [contents and group members] fruitfully'. In their regular (non-CI) lessons, the teachers were accustomed to assigning tasks, giving instructions, monitoring students' activities, helping them when they were in trouble and expecting a (correct) answer to a question. They wanted students to become independent learners, but they thought pupils needed their constant support and supervision. They required students to reach the solution through reasoning and discussing a classroom task in face-to-face social interactions or in groups, but under the constant guidance of the teacher and in a few progressive steps or lessons managed by the teacher.

The difficulty in delegating authority was reflected in the creation of a teaching unit in two main ways. The first was the tendency to give pupils detailed instructions to solve the problem. This was another (indirect) way of supervising students' work in order to prevent mistakes and minimize 'wasting' valuable instructional time. They

discussed at length how many and which types of directions ('commands') were to be included in the task in order to prevent students from failing and to help them 'discover' what the teacher had planned for them to discover. So they tended to simplify the content and the process of learning. However, they were aware that this could remove much of the task's uncertainty and that assigning a group a cooperative task meant that the teacher was ready to accept unexpected solutions and answers. So, after long discussions, Silvia summarized their point of view: 'We must give up thinking they will do what we have planned in detail. We can think of everything and imagine their answers but they will give us different ones'.

Secondly, an emphasis was placed on prerequisites. For the Bologna teachers, pupils learn step by step, through sequential 'bricks' of progressive difficulty that construct the knowledge of a particular topic (like the idea of scaffolding). For Silvia: 'Pupils shouldn't learn the whole concept in only one activity!', while Valeria (fourth grade) remarked: 'Learning is systematic work: recalling past concepts and revising them. ... It changes according to psychological development'. In their opinion, if this process was missing, students might fail in the task or just memorize definitions without understanding them properly. 'The main unit theme should have been explained a bit beforehand [they do it by themselves]' said Serena (second grade).

This second aspect was closely related to the curriculum. The Bologna teachers stressed the importance of introducing CI in a way that it fit into the annual programme that each teacher had to adhere to and they were often concerned about the possibility of doing this.⁹ A very common exchange was: 'Are you already there?', and another teacher replied 'Have you dropped behind? ... me too'. The cultural and organizational framework in which the teachers normally work was partly revealed by this process. The interdisciplinary topic of the CI unit required collaboration with colleagues from different subject areas (which is not always guaranteed). To be effective, CI needed to be consistent with the rhythm and contents of the classroom. However, despite this, they sometimes viewed CI as a way of instead following their own ideas and educational purposes, the main one being to promote pupils' capacity to cope with contemporary issues critically, because 'It's useful to know about them if you are living in today's world', explained Valeria.

Learning to delegate authority took time and was particularly challenging for these teachers. Faced with the CI strategy, they problematized the perception of their role as mediators in the process of learning and the ways they used to delegate authority. CI requires teachers, first, to create and present the task and the group work, and then to give each group the power to appraise and to decide how to divide the task into steps: the process of learning is mediated by the students. Simultaneously, in each group, the pupils explore and study on their own in depth the main question (Big Idea) from different points of view. This demand on students went halfway to meeting the way in which these teachers habitually managed the process of learning. In their view, the process of learning seems to start from a direct experience or question posed by the teacher, who leads pupils through gradual steps to discuss, discover and conclude the task. The new content would be repeated over time (during the school year) in different ways and become progressively more difficult, according to the development of pupils' knowledge and activities. The Bologna teachers tended to transfer this teaching style – in itself useful and effective in their daily practice – to the CI task, whose principle aims are giving voice to, and recognizing competences, especially of those students who are usually excluded from day-to-day activities.

Teachers and multiple ability tasks

The notion of multiple ability is central to make effective the group task, which requires a broader range of intellectual abilities, and crucial for successful status treatments. It sets the stage for evaluating the teachers' and the students' expectations for competences and their view of what is 'smart' in an equitable classroom (Cohen and Lotan 2006, 746).

Teachers were urged to adapt, adjust and modify not only their instructional practices, but their approach to the curriculum as well. This was not new for Bologna teachers. They did not consider the idea of multiple abilities to be new, since it reminded them of the educational changes that took place in the 1970s in Italy (such as the reforms relating to full-time schooling), which had become part of the varied curriculum of the Italian primary school and of their professional background. The Bologna teachers seemed confident with multiple intelligence, because musical, kinaesthetic and visual skills were all included in the annual planning process. However, although these skills were recognized, they often seemed to be considered additional to the linguistic and logical-mathematical ones. They were implemented at a specific time in a rigid timetable, often by temporary teachers or by one of the classroom teachers for a few hours. So they were perceived as something subordinate and kept apart from the main subjects, and they also received a separate evaluation, which did not fully take into account their use as a means for teaching and learning in a different way.

Despite this, during the design of the CI unit, the Bologna teachers came up with so many creative activities and suggested the use of so many different materials and tools that it was really difficult to choose the most interesting ones. They enriched the discussion by bringing in and making use of pictures, books, songs and poems and by illustrating some of their past experiences which they had found to be good and attractive practices for pupils. The teachers set such high creative goals that it was difficult to explore them in the very limited time of our meetings. For them, using multiple ability tasks was a way of motivating students to engage with the task and stimulating the pupils' interests. It was first and foremost a method for not boring pupils and developing different types of competences both for low- and high-status students. Encouraging low-status students to participate and so to change the teachers' (low) expectations was only a secondary aim.

Though enthusiastic, the Bologna group expressed some doubts. Using multiple abilities seemed to be easier in the construction of the final activity of the cooperative task, when instructions required pupils to work out what they had just learnt, rather than in the first part of the task, when students were approaching a new concept. Quite often, 'creativity' became synonymous with multiple abilities. They appreciated the use of multiple intelligences, but in the end they agreed with the predominance and the priority of developing linguistic skills at school: 'I think understanding a text is what school should teach. Reading and writing', argued Maria (fourth class): 'If they don't get it now, they'll have problems in Secondary School.' Therefore, it was not easy for the teachers to use musical, kinaesthetic and visual intelligences as an innovative way of teaching and of organizing content. In fact, these teachers worried that given the pressure of 'covering' an extensive syllabus,¹⁰ a further focus on developing multiple abilities and devoting time to extra activities was a 'luxury' they could hardly afford. At the same time, in relation to this, these teachers complained about the lack of suitable textbooks for educational innovation, and Silvia explained the need 'to

pick and choose activities in the books to make the process of learning more effective'.

On reflection, it seemed that in the present Italian curriculum and in the perception teachers had of their professional capacity, there was a tendency towards homogenizing students. With specific content, norms and standards as targets and the requirement to assess pupils a priori on the basis of these, one gets a picture of an imaginary 'average' student rather than of heterogeneous classrooms (as far as language, cultural background, competences and intelligences are concerned). Each student, as well as each teacher, had to adapt educational objectives to this. A pre-determined path might classify and pigeonhole students' and teachers' ideas and potentials and make planning for heterogeneity through multiple abilities difficult.

Some further reflections: the professional identity between change and resistance

Observing 'backstage' the process of constructing a new teaching unit and the subsequent discussion gave me the opportunity to problematize what was transpiring in the process of working towards educational innovation.

Cooperative learning is not merely a technique, a set of tools and rules one can pick up and put back. It leads to the thorough rethinking of teaching and learning. The process of integrating it into one's daily practice requires time and 'hard work' as the teachers themselves stated in their discussions. CI group work entails a transformation of the perception of students' competences, a development of the group task in order to take into account different intelligences and a change in the teacher's role.

The observed process did not follow linear and progressive paths, but was characterized by tensions between the desire to embrace new educational ideas and tools and the difficulty of integrating these into the 'culture of the school' (Florio-Ruane 1996; Gobbo 2000). This tension emerged as a constant 'movement', which at times embraced and at times kept its distance from the new perspectives. The new creative ideas and the ones the teachers were accustomed to were thus interwoven. The Bologna teachers did not cope with these changes passively, but actively revised them according to their professional cultural traditions. What seems to be emerging from these observations is a pre-existent 'culture of learning' which teachers referred to and which must be taken into account when one wants to undertake a process of educational innovation.

Borrowing new teaching ideas entails taking into account the educational cultural context and the different ways of considering teaching and learning which organize participation and practice at school. Elements of school culture and organization, educational values and beliefs and the teachers' professional experience work as forces of specification, variation and interpretation of models in education (Phillips and Ochs 2004; Gobbo 2007).

Finally, this paper sheds some light on the meetings of this teacher group as a space of encounter and revision among different cultural perspectives, characterized by opportunities, discrepancies and different meanings. This game of differences and similarities revealed that educational innovation is a dynamic process, which starts with the ideas and insights learned from CI. However, the outcome is not always predictable and the final product will vary, depending on the educational realities that teachers have to negotiate every day in their schools and classrooms. The main effect

of the process described in the foregoing is an awareness and greater ability to reflect on and critically evaluate one's usual educational styles and concepts, and an openness to explore previously unfamiliar strategies. The Bologna teacher group can be viewed as a 'space' where revision took place and where the creation of original and previously unpredictable educational answers came to fruition. Group work conducted in this manner might be considered a desirable means of achieving educational innovation. In conclusion, it appears that, if the organizational and cultural school context and the absence of clear educational policies regarding in-service teacher training reduce the teachers' capacity for choice, forming a group, as the Bologna teachers did, can break the isolation many teachers experience and keep the debate and reflection regarding equity issues alive.

Notes

1. The topic of this article is part of a wider ethnographic research project developed from 2007 to 2009 within the doctorate course in Education at the University of Turin, Italy.
2. We cannot forget Freinet's pedagogy, based on cooperation and group work and aimed at integrating and giving opportunity to disadvantaged children to learn.
3. 'A status characteristic is an agreed-upon social ranking where everyone feels that it is better to have a high rank than a low rank.' It is based upon general social distinctions (such as race and gender) or academic abilities (such as reading or calculating) which become the basis for differential expectations of competences (Cohen 1994).
4. In CI, the tasks are referred to as multiple ability tasks, centred around a 'Big Idea', i.e. an open question which requires students to use many different types of intelligence (Gardner 1991; Sternberg and Spear-Swerling 1997).
5. Acronym for Cooperative Learning in Intercultural Education Project, coordinated by IAIE and directed by P. Batelaan during 1997–99 (Batelaan 1998).
6. Data refer to the school year 2006–07.
7. A quotation from Gianni Rodari 'Cibo per la mente' in Rodari (1981).
8. The teacher names are pseudonyms to protect the privacy of the research participants.
9. In spite of the fact that the curriculum has been formulated as 'suggestions', the teachers viewed it as compulsory, perceiving it as some sort of constraint. In Italy the school system is organized and managed by the Ministero della Pubblica Istruzione (Ministry of Education), which provides all state schools with the contents, norms, financial resources and standards that need to be obtained (*Indicazioni Nazionali per i Piani di Studio Personalizzati* 2002); according to the regulation on School Autonomy (*DL Moratti 59 del 19 febbraio 2004 per la scuola primaria*), each school has a certain freedom to implement, choose and organize educational objectives, programmes and the school schedule.
10. During my research project, Italian schools were following the *Indicazioni Nazionali per i Piani di Studio Personalizzati* 2002 (Minister Moratti) or they were experimenting with the *Nuove Indicazioni per il Curriculum D.M. del 31 luglio 2007* (Minister Fioroni).

Notes on contributor

Isabella Pescarmona recently received her doctorate at the Faculty of Education of the University of Turin, Italy. Her areas of research are cooperative learning, intercultural education and educational innovation. She collaborates with the Education Department and Political Science Department in Turin.

References

- Augelli, A., F. Gobbo, I. Pescarmona, and M. Traversi. 2005. *Cooperative learning nelle classi multiculturali. Uno sguardo all'istruzione complessa*. Quaderni di formazione interculturale. Bologna: CD/Lei.

- Batelaan, P. 1998. *Towards an equitable classroom. Final report of Cooperative Learning in Intercultural Education Project (CLIP)*. International Association for Intercultural Education (IAIE), Hilversum, UK: Taylor & Francis.
- Batelaan, P., and I. Gundara. 2000. Intercultural education, co-operative learning and the changing society. *European Journal of Intercultural Studies* 11, Suppl.: 31–4.
- Cohen, E. 1994. *Designing groupwork: Strategies for heterogeneous classrooms*. New York: Teachers College Press.
- Cohen, E. 2003. Equità, scuola e istruzione complessa: I principi di base. In *Multiculturalismo e Intercultura*, ed. F. Gobbo, 153–78. Padova: Imprimatur.
- Cohen, E., and R. Lotan, eds. 1997. *Working for equity in heterogeneous classrooms. Sociological theory in practice*. New York: Teachers College Press.
- Cohen, E., and R. Lotan. 2006. Equity in heterogeneous classrooms. In *Handbook of research on multicultural education*, ed. J.A. Banks and A.M.C. Banks, 736–50. San Francisco: Jossey-Bass.
- Florio-Ruane, S. 1996. La cultura e l'organizzazione sociale della classe scolastica. In *Antropologia dell'educazione. Scuola, cultura, educazione nella società multiculturale*, ed. F. Gobbo, 171–90. Milan: Edizioni Unicopli.
- Gardner, H. 1991. *Formae mentis. Saggio sulla pluralità dell'intelligenza*. Milan: Feltrinelli. (Original edition Gardner, H. 1983. *Frames of mind. The theory of multiple intelligences*. New York: Basic Books.)
- Gobbo, F. 2000. *Pedagogia interculturale. Il progetto educativo nelle società complesse*. Rome: Carocci.
- Gobbo, F., ed. 2003. *Etnografia dell'educazione in Europa. Soggetti, contesti, questioni metodologiche*. Milan: Edizioni Unicopli.
- Gobbo, F. 2007. Teaching teachers cooperative learning: An intercultural challenge. In *Social justice and intercultural education: An open-ended dialogue*, ed. G. Bhatti, 76–92. London: Trentham Books.
- Jeffrey, B. 2006. How to 'describe' ethnographic research sites. In *Researching education policy: Ethnographic experiences*, ed. G. Troman, B. Jeffrey, and D. Beach, 59–74. London: Tufnell Press.
- Lotan, R. 2003. Group-worthy tasks. *Educational Leadership* 6, no. 6: 72–5.
- Lotan, R. 2006. Managing groupwork in heterogeneous classrooms. In *Handbook of classroom management: Research, practice and contemporary issues*, ed. C. Weinstein and C. Evertson, 525–39. Mahwah, NJ: Lawrence Erlbaum.
- Phillips, D., and K. Ochs, eds. 2004. *Educational policy borrowing: Historical perspectives*. Oxford studies in comparative education. Oxford: Symposium Books.
- Rodari, G. 1981. *La grammatica della fantasia. Introduzione all'arte di inventare storie*. Rome: Editori Riuniti.
- Sternberg, R.J., and L. Spear-Swerling. 1997. *Le tre intelligenze: Come potenziare le capacità analitiche, creative e pratiche*. Trento: Erickson. (Original edition Sternberg, R.J., and L. Spear-Swerling. 1966. *Teaching for thinking*. Washington, DC: American Psychological Association.)
- Verlot, M., and R. Pinxten. 2000. Intercultural education and complex instruction. Some remarks and questions from an anthropological perspective on learning. *European Journal of Intercultural Studies* 11, Suppl.: 7–14.